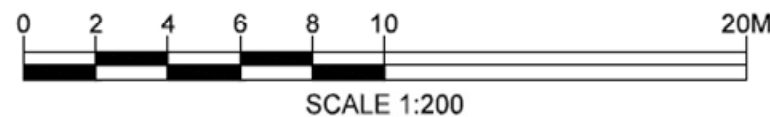


northern  
beaches  
council

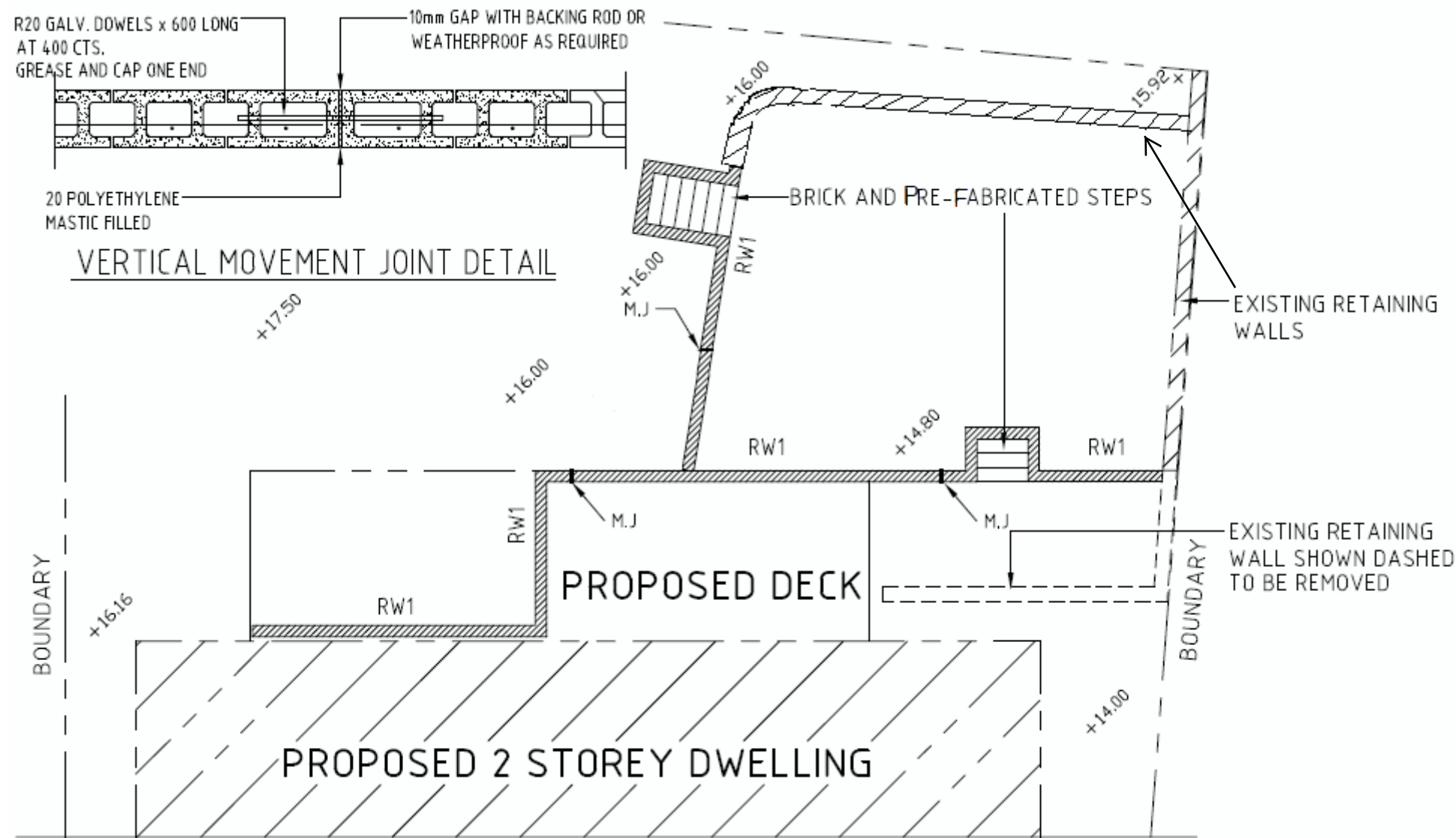
**THIS PLAN IS TO BE READ IN  
CONJUNCTION WITH  
THE CONDITIONS OF DEVELOPMENT  
CONSENT**

DA2019/1373

PROPOSED SITE PLAN & SITE ANALYSIS SCALE 1:200



Applicants Paul and Alice Greenlees	Proposed Retaining Walls at 10 Paruna Place Cromer NSW 2099 Lot No. 49 DP No. 239139			
	Landscaping Site Plan			
Drafted by: Paul Greenlees	Date 2/12/19	FSCM NO 1	DWG NO 1	REV 1
	SCALE 1:200		SHEET 1 OF 1	



**RETAINING WALL RW1 LAYOUT**  
SCALE 1:100

## CONSTRUCTION NOTES

### GENERAL

- G1 These drawings shall be read in conjunction with all architectural drawings
- G2 Dimensions shall not be obtained by scaling the structural drawings.
- G3 Setting out dimensions shown on the drawings shall be verified by the builder.
- G4 Refer to architectural drawings for brick and block wall thickness where not mentioned on these drawings, and for falls in slabs, waterproofing membranes and all architectural features such as drip grooves, fillets etc.
- G5 The engineer is to be notified when rock is encountered.

### FOUNDATIONS

- F1 Excavation shall be taken into uniform virgin strata, the allowable bearing pressure on this material is assumed to be **HARD CLAY OR SHALE**
- F2 Excavation shall not be made below the level of any existing adjacent footings
- F3 Footings shall be placed centrally under walls and columns, unless noted otherwise.
- F4 All excavations shall be finished clean and horizontal.
- F5 The Builder shall obtain approval of the foundation material before placing concrete.
- F6 All filling work shall comply with AS2870.

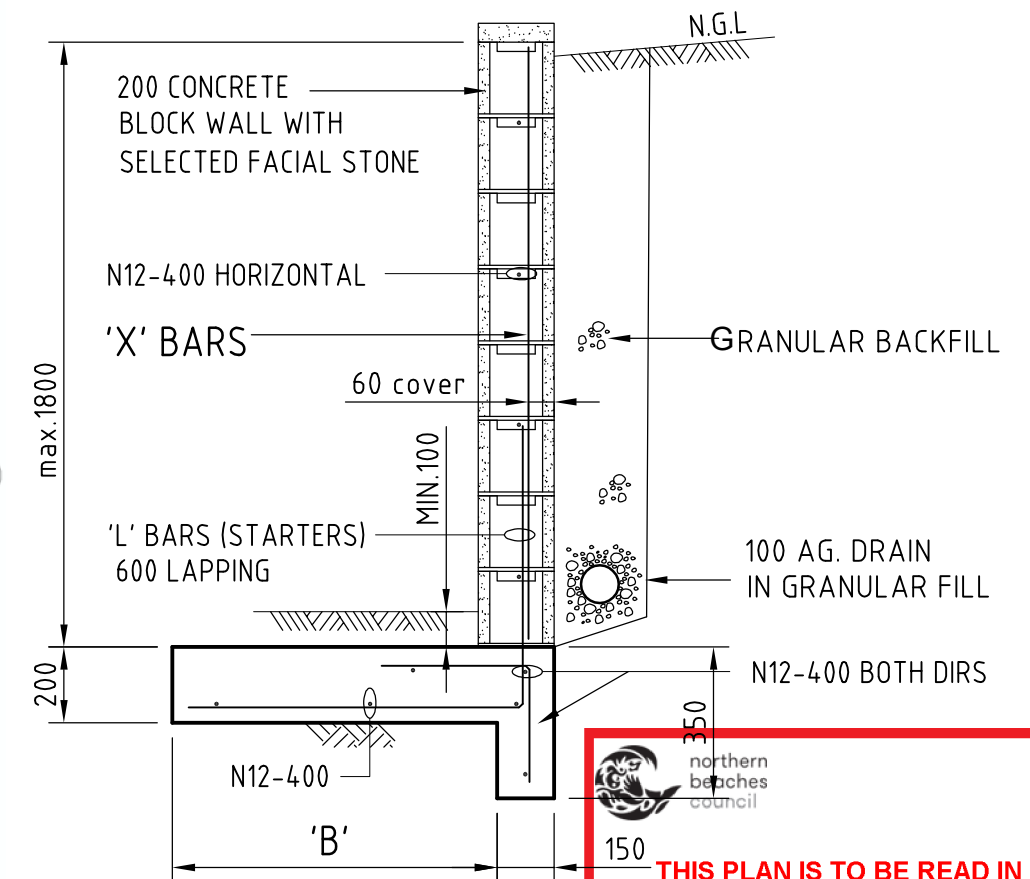
### CONCRETE

- C1 All reinforcing bars to be in accordance with AS 1302 steel reinforcing bars for concrete.
- C2 All fabric to be in accordance with AS 1304 hard drawn steel wire reinforcing fabric for concrete.
- C3 All concrete work to be in accordance with AS 3600 concrete structures code.
- C4 Minimum 28 day strength of concrete :
 

Element	F'c (MPa) - AS3600	Slump (mm)
FOOTINGS	25	80
- C5 Concrete cover to reinforcement:
 

	Unprotected	Membrane Protected
Footings	40	

RETAINING WALL RW1 SCHEDULE			
HEIGHT 'H'	BASE 'B'	'X' BARS	'L' BARS
800 - 1400	800	N12-400	N12-400
1400 - 1800	1200	N16-400	N16-400



**RETAINING WALL - RW1**  
SCALE 1:20

### REINFORCEMENT

- R1 Reinforcing lengths are not to be scaled from drawings.
- R2 Minimum laps for reinforcing bars shall be as follow: --

BAR LAPPING SCHEDULE			
BAR SIZE	12	16	
LAP LENGTH	400	600	

### BLOCKWORK

- B1 Blocks shall have a minimum compressive strength of 15 MPa.
- B2 Grout shall achieve a minimum compressive strength  $f'c=25\text{MPa}$  at 28 days with 230 mm slump mix which will flow freely without segregation.
- B3 All grouted walls shall be vibrated and/or rodded to ensure completed filling and compacting of grout in all cores.

CLIENT			DESIGNED BOB FENG B.E. M.Eng.S. M.I.E.Aust.		PROJECT AT: PROPOSED RETAINING WALLS at: No.10 PARUNA PLACE, CROMER		<b>FENG Consulting Engineers</b> - Civil and Structural Engineering Suite 212, Level 2 Mobile: 0414 683288 No.4-10 Goulburn Street Fax: (02) 9264 3352 Sydney 2000 Email: shine.eng@bigpond.com A.B.N. 15 100 744 376	
			APPROVED		SCALE	DRAWING TITLE		
					DATE OCT 19	RETAINING WALL RW1 PLAN AND DETAILS		
					DRAWN	DRAWING No. 19874 - S01	ISSUE A	AMEN'T -
			A	01.11.19	ISSUE FOR CC AND COUNCIL APPROVAL			
			No.	Date	Amendment/Issue			